



45TH LTEN Annual Conference

Show Me the Money: Moving From Impact to ROI

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Location: Baltimore 5

Presented by:

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President and CEO

ROI INSTITUTE*

LIFE SCIENCES TRAINERS & EDUCATORS NETWORK

Objectives



- ◆ Isolate the effects of programs
- ◆ Convert business measures to money
- ◆ Calculate ROI

The ROI calculation is simple






$$\text{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\text{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100$$

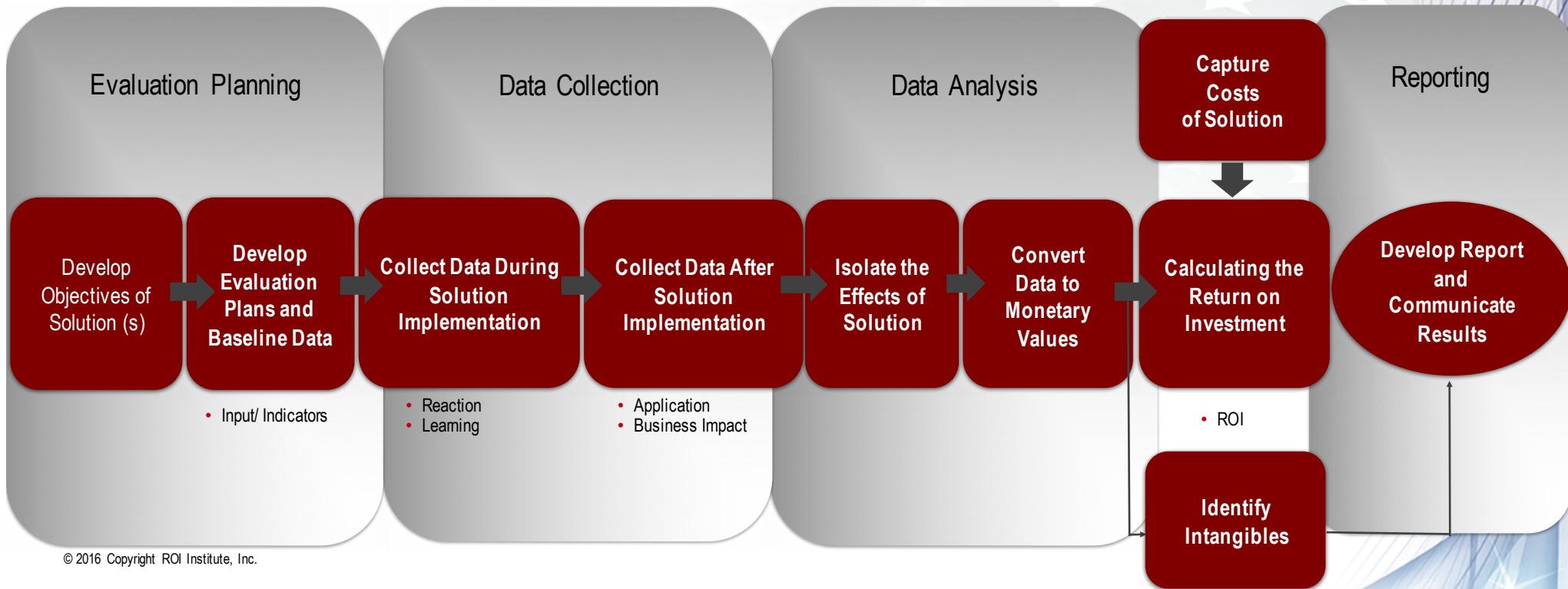
TRY IT!

$$\text{BCR} = \frac{\$750,000}{\$425,000}$$

$$\text{ROI} = \frac{\$750,000 - \$425,000}{\$425,000} \times 100$$

Levels of Evaluation	Measurement Focus	Typical Measures
0. Inputs and Indicators	The input into the project in terms of scope, volume, efficiencies, costs	Participants, Hours, Costs, Timing
 1. Reaction & Perceived Value	Reaction to the project or program, including the perceived value	Relevance, Importance, Usefulness, Appropriateness, Intent to use, Motivation to take action
 2. Learning	Learning to use the content and materials, including the confidence to use what was learned	Skills, Knowledge, Capacity, Competencies, Confidence, Contacts
 3. Application & Implementation	Use of content and materials in the work environment, including progress with actual items and implementation	Extent of use, Task completion, Frequency of use, Actions completed, Success with use, Barriers to use, Enablers to use
 4. Business Impact	The consequences of the use of the content and materials expressed as business impact measures	Productivity, Revenue, Quality, Time, Efficiency, Customer Satisfaction, Employee Engagement
 5. ROI	Comparison of monetary benefits from program to program costs	Benefit-Cost Ratio (BCR), ROI%, Payback Period

ROI METHODOLOGY PROCESS MODEL



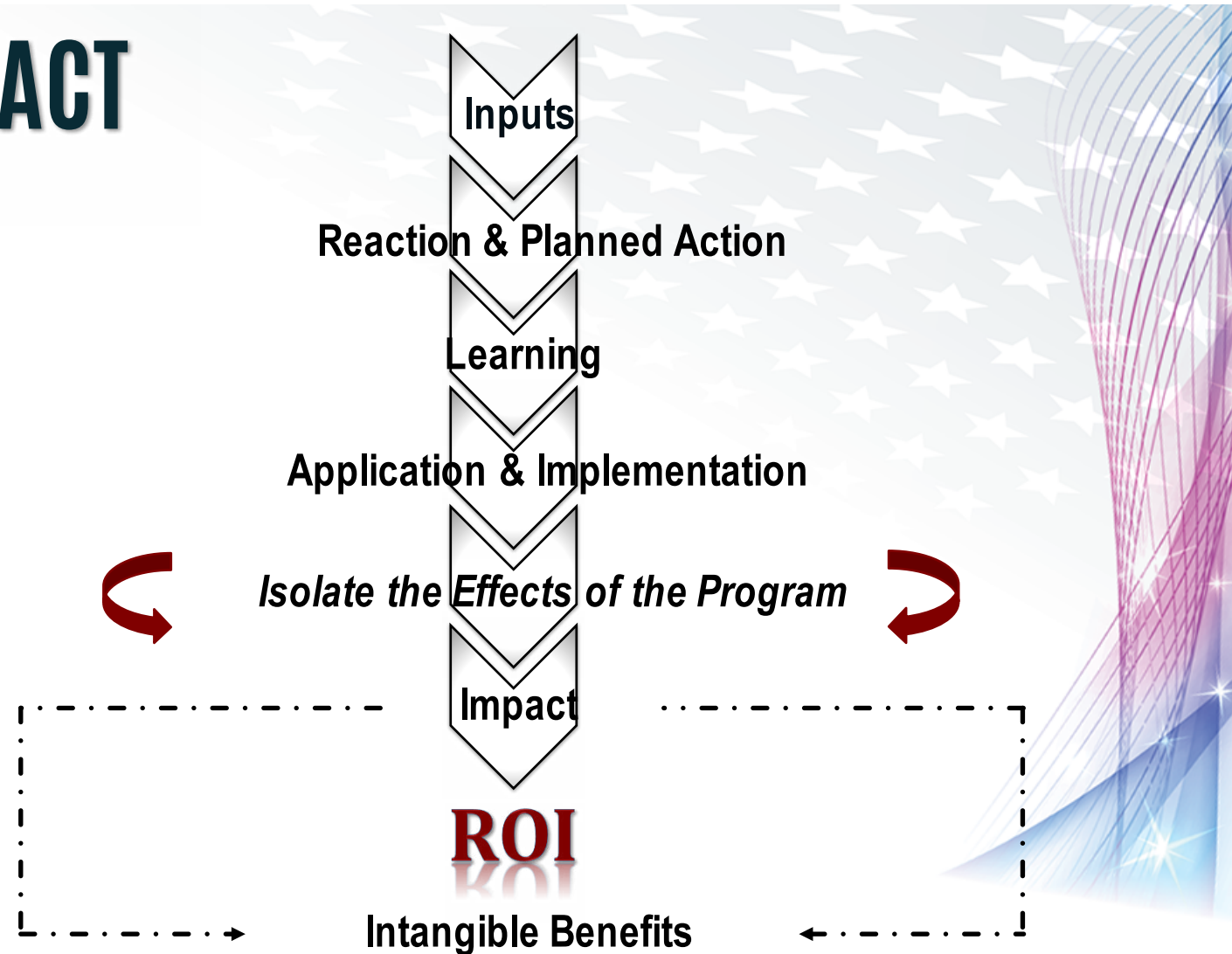
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Guiding Principles

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1. Report the complete story
2. Conserve evaluation resources
3. Use the most credible sources of data
4. Choose the most conservative alternatives
5. Isolate the effects of the program
6. Assume no data, no improvement
7. Adjust estimates for error
8. Throw out the extreme and unsupported claims
9. Use first year benefits for short-term programs
10. Include fully-loaded costs
11. Report intangible benefits
12. Communicate results to all stakeholders

CHAIN OF IMPACT



Only a Select Few Programs are Evaluated to ROI

Consider the following:

- Life cycle of the program
- Linkage of program to operational goals and issues
- Importance of program to strategic objectives
- Top administrator interest in the evaluation
- Cost of the program
- Visibility of the program
- Size of target audience
- Investment of time required

ROI Calculation

$$\text{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\text{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100$$



FIVE STEPS TO THE MONEY



Steps to Convert Benefits to Money

5

1. Define the unit of measure
2. Determine the value of the measure (V)
3. Determine the change in performance (ΔP)
4. Determine the annual change in performance ($A\Delta P$)
5. Calculate the annual monetary benefit ($A\Delta P \times V$)

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01.

Define the unit of measure.

The standard unit by which a quantity is measured.

Define the Unit of Measure

If this	Then this
Increase sales to new customer	1 sale
Reduce turnover of mid-level managers	1 turnover statistic
Reduce complaints regarding hostile work environment	1 complaint
Increase in employee engagement	1 percentage point
Reduce time in meetings	1 hour
Increase time in knowledge management system	1 minute

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02.

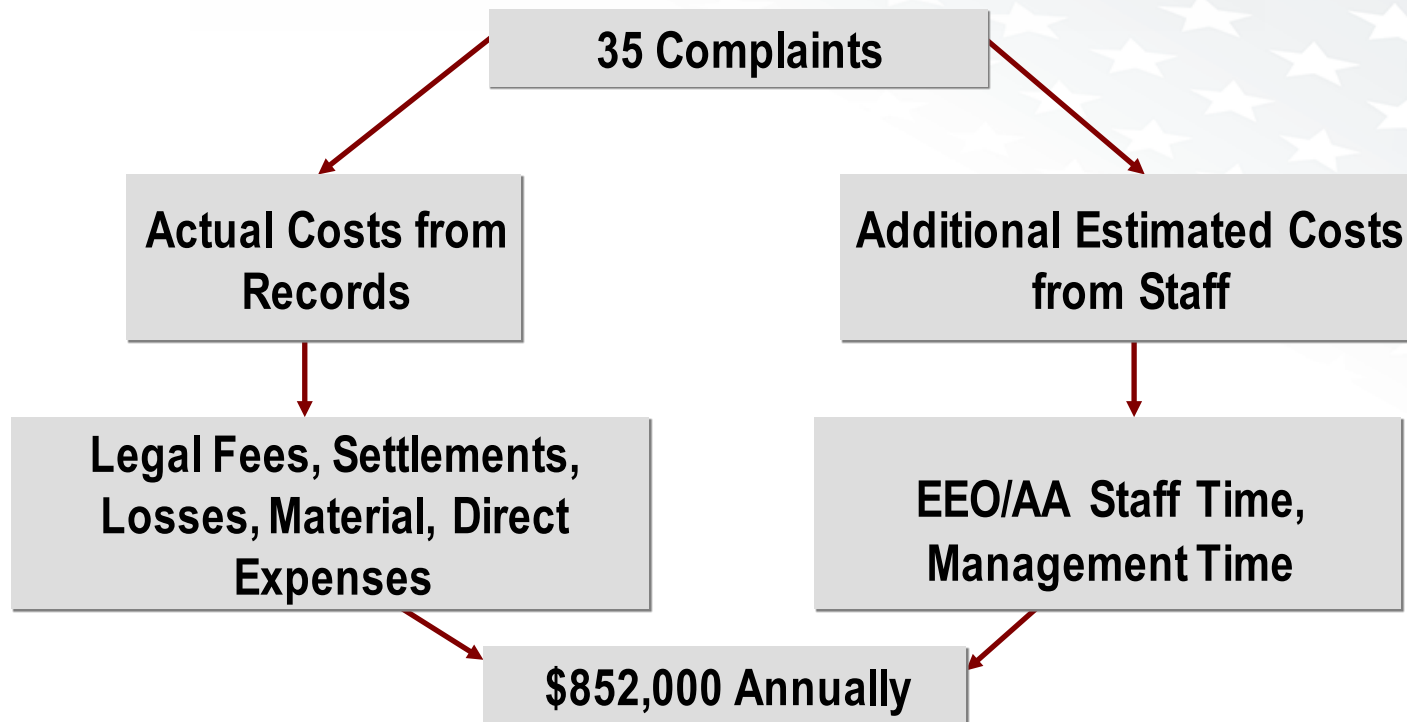
Determine the value.

The monetary value of the measure of interest.

Determine the Value of the Measure

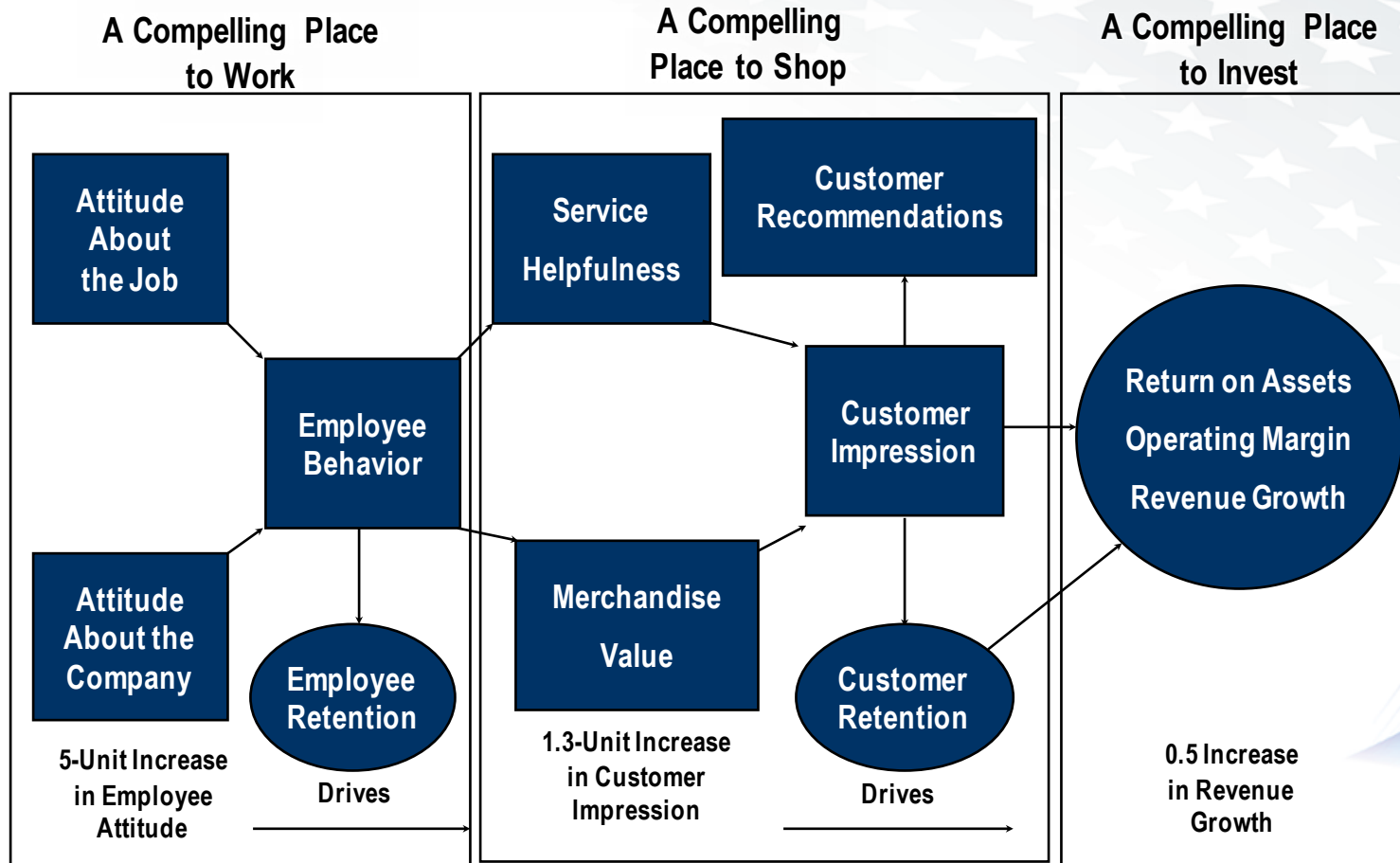
- Converting output to contribution – standard value
- Converting the cost of quality – standard value
- Converting employee's time – standard value
- Using historical costs/existing data
- Using internal and external experts
- Using data from external databases
- Linking with other measures
- Using participants' estimates
- Using supervisors' and managers' estimates
- Using staff estimates

Cost of a Complaint



Cost per complaint: $\frac{\$852,000}{35} = \$24,343$

Linking with Other Measures



Estimations



- Identify the most credible source of data.
- Ask three questions:
 1. What happens when?
 2. Given what you know, how much does it cost (or is it worth)?
 3. How confident are you in your estimate?

Example: 1 Unexpected Absence

Most Credible Source: Supervisors

Data Collection Approach: Focus Group

Three questions (round robin format):

1. What happens when someone does not show up for work?
2. Given what you know about what happens, what does it cost for one person not to show up on one day?
3. How confident are you in your estimate?

Example: Unexpected Absenteeism

Supervisor	Estimate Value	Confidence	Adjusted Value
1	\$1,500	90%	
2	\$2,000	80%	
3	\$1,800	85%	
4	\$2,100	75%	
5	\$1,000	95%	
Monetary value of an absence			

03

Determine the change in performance.

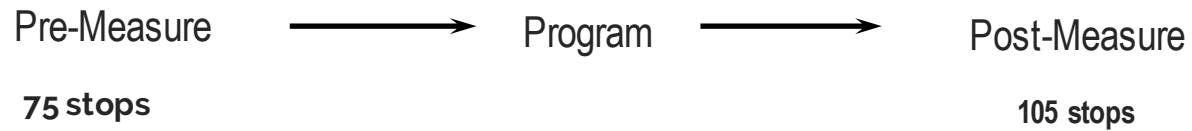
The output of your Level 4 evaluation indicating the change in the business measure due to the program (after isolation)

CLASSIC CONTROL GROUP DESIGN

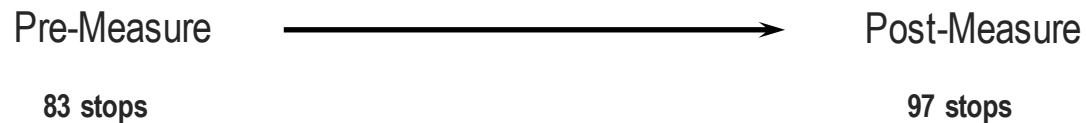
WHAT IS THE DIFFERENT IN THE CHANGE IN PERFORMANCE?

AVERAGE NUMBER OF STOPS PER DAY

Experimental Group



Control Group



Post- Program Only Design

WHAT IS THE DIFFERENCE?
HOURS SPENT IN MEETINGS EACH WEEK

Experimental Group

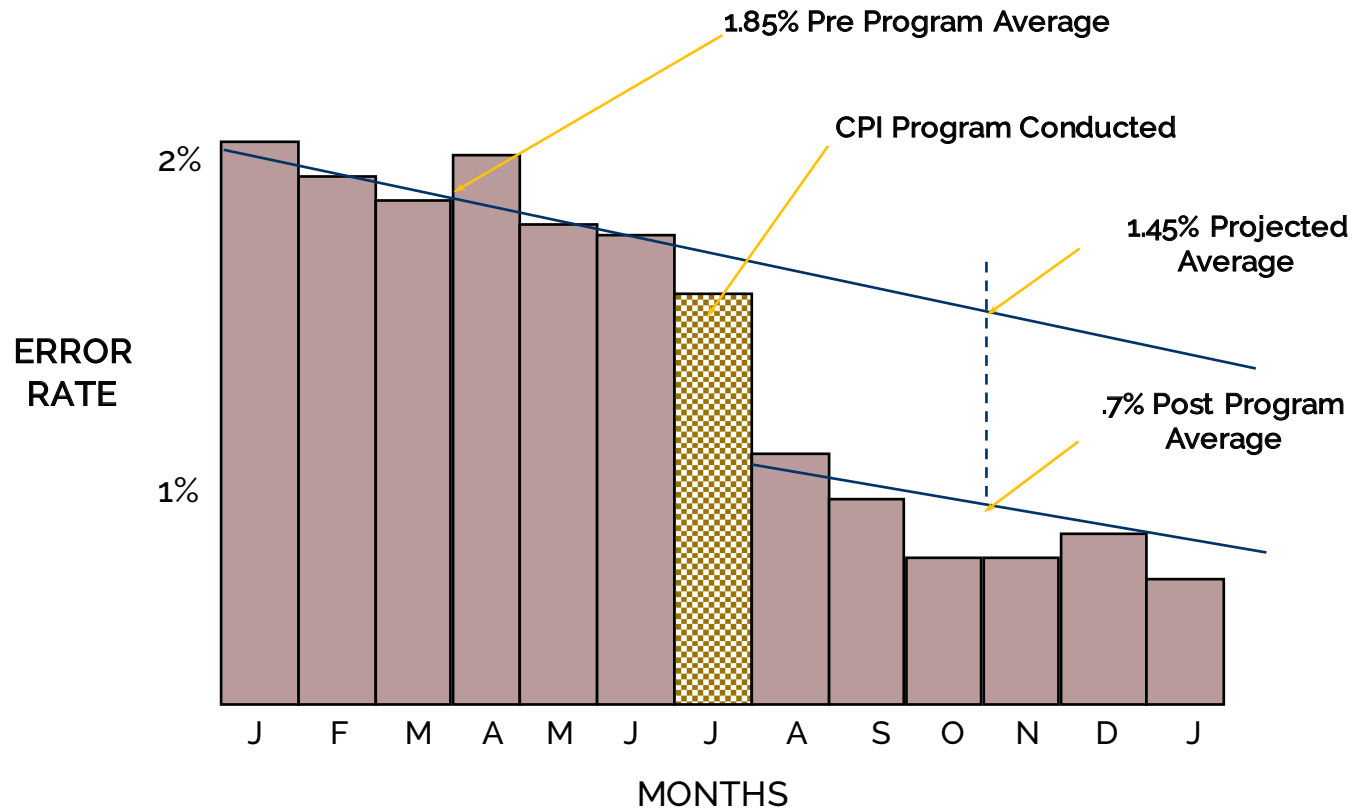
Program —————> Post-Measure
3 hours

Control Group

—————> Post-Measure
8 hours



TREND LINE ANALYSIS



EXAMPLE OF ESTIMATION

MONTHLY DECREASE IN MISSED PICKUPS: 50 (fact)

Contributing Factors	Consensus Impact (%)	Average Confidence (%)
New GPS Technology	32%	83%
Process Changes	41%	87%
Training	14%	62%
Incentives	11%	91%
Other	2%	91%
	<hr/> 100%	

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04.

**Determine the annual
change in performance.**

*ROI is reported as an annual percentage
returned.*

Define the Annual Change in Performance

If this	Then this
Grievances go down 7 per month	Grievances go down 84 per year (7 X 12)
Absenteeism goes down 1.2% and there are 120 people working 240 days per year	Absenteeism goes down 345.6 per year (.012 x 120 x 240*)
Sales increase \$1,250 per week	Sales increase \$60,000 per year (\$1,250 x 48 weeks*)
Employee turnover decreases 10 per year	Employee turnover decreases 10 per year
Kilowatt hours (kWh) used per month go down by 100 per month	Kilowatt hours (kWh) used per month go down by 1,200 per year (100 x 12)

*Varies based on organization practice.

05.

**Calculate the annual
monetary benefit.**

*Multiply the annual change by the value of
one unit.*

Calculate the Annual Monetary Benefit

If this	then this	and this	then this
Grievances go down 7 per month	Grievances go down 84 per year (7 X 12)	Value = \$6500	\$546,000 (84 x \$6500)
Absenteeism goes down 1.2% and there are 120 people working 240 days per year	Absenteeism goes down 345.6 per year (0.12 x 120 x 240*)	Value = \$105	\$36,288 (345.6 x \$105)
Sales increase \$1,250 per week	Sales increase \$60,000 per year (\$1,250 x 48 weeks*)	Value = 15% profit	\$9,000 (\$60,000 x .15)

Steps to Convert Benefits to Money

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Example: Grievances

5

1. 1 Grievance
2. $V = \$6,500$ Director of Nursing and HR expert
3. $\Delta P =$ reduction in grievances and average of 7 per month due to the program
4. $A\Delta P =$
5. $A\Delta P \times V =$

Turnover of Middle Managers: A Word Problem

Your organization is experiencing a high level of **turnover of middle managers who are paid \$75,000 per year** (fully-loaded). To capture the value of turnover for this group, you rely on a **database**. The database provides you with various job groups and a **range** for the cost of turnover for each group. A program was implemented to reduce the turnover. One year after the program, you found that turnover decreased by **10 for the year** – a direct result of the program. Using your five steps, the guiding principles, and the Turnover Cost Summary, calculate the **annual monetary value** of the reduction in turnover of middle managers who are paid \$75,000 per year.

Steps to Convert Benefits to Money

1. Define the unit of measure
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Turnover cost summary

Job Type/Category	Turnover Cost Ranges
Entry level – hourly, non-skilled	30-50%
Service/ Production workers – hourly	40-70%
Skilled hourly	75-100%
Clerical/ Administrative	50-80%
Professional	75-125%
Technical	100-150%
Engineers	200-300%
Specialists	200-400%
Supervisors/ Team Leaders	100-150%
Middle Managers	125-200%

If you choose not to convert, report benefits as intangible.

- Adaptability
- Awards
- Brand awareness
- Career minded
- Caring
- Collaboration
- Communication
- Conflicts
- Corporate social responsibility
- Decisiveness
- Engagement
- Image
- Innovation
- Job satisfaction
- Leadership
- Networking
- Organizational climate
- Organizational commitment
- Reputation
- Stress
- Talent
- Teamwork



ROI CALCULATION

$$\text{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

$$\text{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100$$

Program Costs are Fully-Loaded Costs

- Assessment Costs (Prorated)
- Development Costs (Prorated)
- Program Materials
- Instructor/Facilitator Costs
- Facilities Costs
- Travel/Lodging/Meals
- Participant Salaries and Benefits
- Administrative/Overhead Costs
- Evaluation Costs



FINAL EXAM: CALCULATE THE ROI



- Data Collection Techniques
 - ▶ (3) Self Assessment Questionnaire – 6 months after program
 - ▶ (3) Employee Survey (25% Sample) – 6 months after program
 - ▶ (4) Complaint and Turnover Records – 12 months after program
- Isolation Techniques
 - ▶ Complaints – Trend Line Analysis
 - ▶ Turnover – Forecasting
- Data Conversion Techniques
 - ▶ Complaints – Historical costs and input from experts (internal EEO/AA staff)
 - ▶ Turnover – External studies within industry
- Program costs
 - ▶ Fully-loaded including needs assessment, development, coordination, salaries and benefits of initial meeting, and evaluation
 - ▶ Total Costs - \$277,987
- Benefits
 - ▶ Complaints
 - ◇ Value of one complaint - \$24,343
 - ◇ Prevented over one year - 14.8
 - ▶ Turnover
 - ◇ Value of one turnover statistic - \$20,887
 - ◇ Prevented over one year – 136



Next Steps

Assess your readiness for ROI

Identify stakeholders and their data needs

Determine the purpose of your evaluation practice

Identify programs suitable for ROI

Develop capability in the ROI Methodology

THANK YOU FOR JOINING US TODAY!



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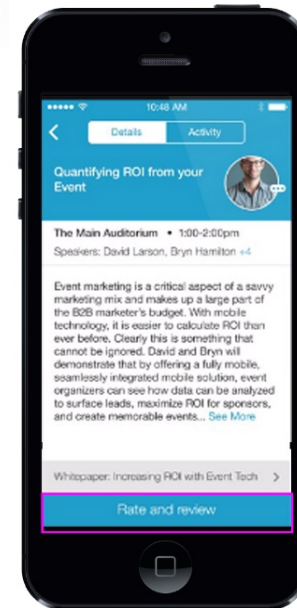
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1. Open the Mobile App
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3. Select the Session you are Evaluating
4. Select the Rate and Review Button

If you do not want to complete the survey in the mobile app, you can collect a hard copy form at the registration desk.

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Thank You!



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